



The Tail Wagging the Dog? The Impact of Removing Infrequently Used Journal Titles on the Stability of the Consortial Core Journals List

Yaşar Tonta & Yurdagül Ünal

Department of Information Management

Hacettepe University

Ankara, Turkey

{tonta, yurdagul}@hacettepe.edu.tr



- Background
- Research setting and data sources
- Research questions
- Method
- Findings
- Conclusion



- Consortial licensing models
 - FTE-based
 - Usage-based
 - Others
- “Orderly retreat”
- MESUR studies



- 115 Turkish universities, 2.5M students, 80K faculty
- The Consortium of Anatolian University Libraries (ANKOS) (www.ankos.gen.tr)
- The National Academic License of Electronic Resources (EKUAL)
- More than 27M articles downloaded from ScienceDirect (2001-2007), SpringerLink (2004-2007) and Wiley InterScience (2003-2006) e-journal databases by ANKOS members were analyzed

Research Questions



- Does incrementally removing the infrequently used journal titles from the tail jeopardize the stability of the core journals list of a consortium of academic libraries?
- How does this affect the consortium members' core journal lists?
- Would consortium members be disenfranchised by removing rarely used titles from the tail?



- Distributions of downloads to journal titles for ScienceDirect, Springer Link and Wiley InterScience e-journal packages using Bradford curves
- Core journal lists identified for ANKOS consortium and ANKOS member libraries
- 5%, 10%, 20% and 30% of journal titles removed from the tails
- Checked to see if ANKOS core journal lists as well as those of member libraries were disenfranchised

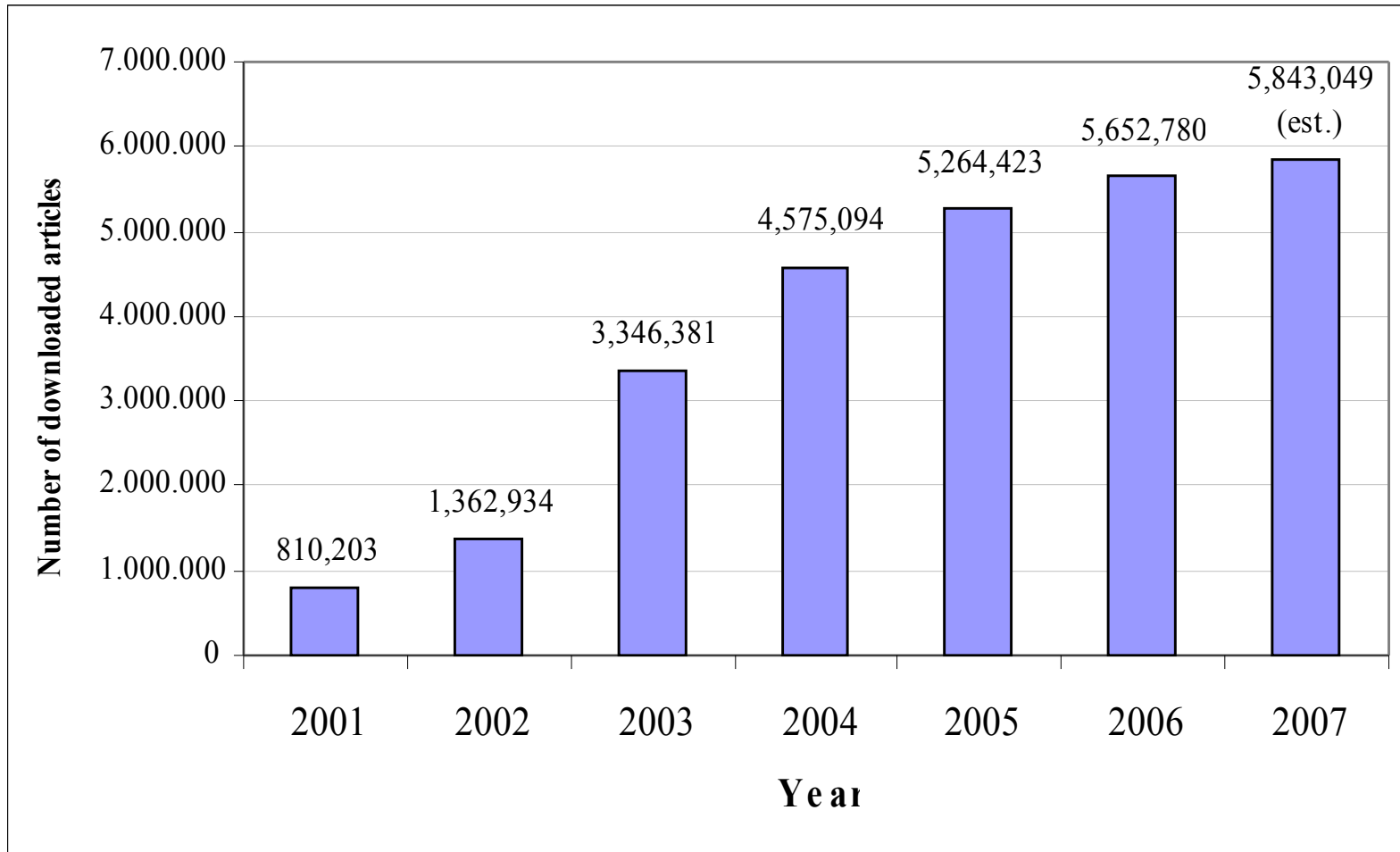


Findings



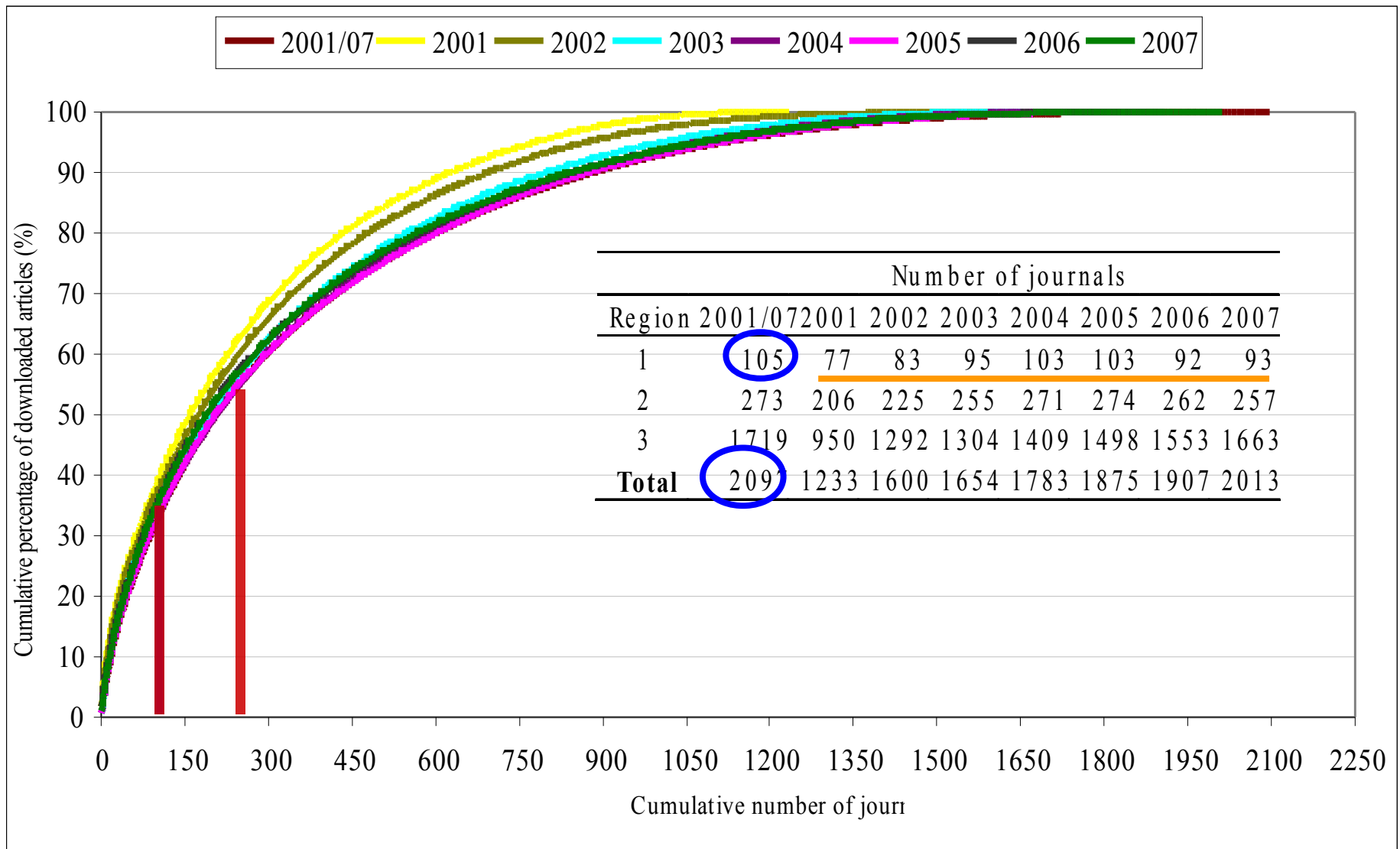
Electronic journal database	Downloads by ANKOS consortium u		
	# of journals used	N	%
ScienceDirect	2,097	25,145,293	90.1
SpringerLink	1,779	1,715,164	6.1
Wiley InterScience	470	1,055,741	3.8
Total	4,346	27,916,198	100.0

Full-text downloads from ScienceDirect e-journals (2001-2007)

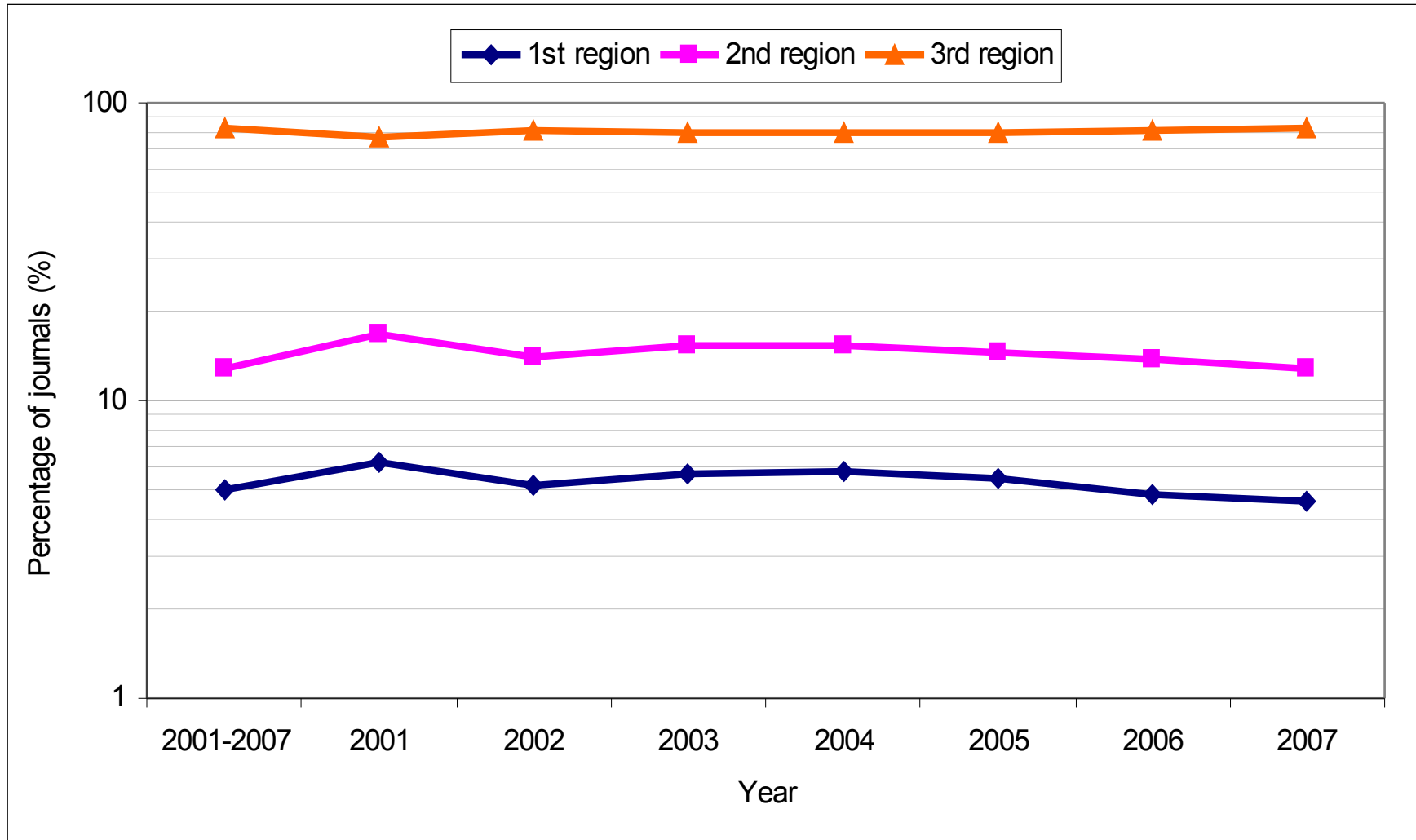




Bradford curves for use of ScienceDirect journals



Yearly distributions of ScienceDirect journal titles by region



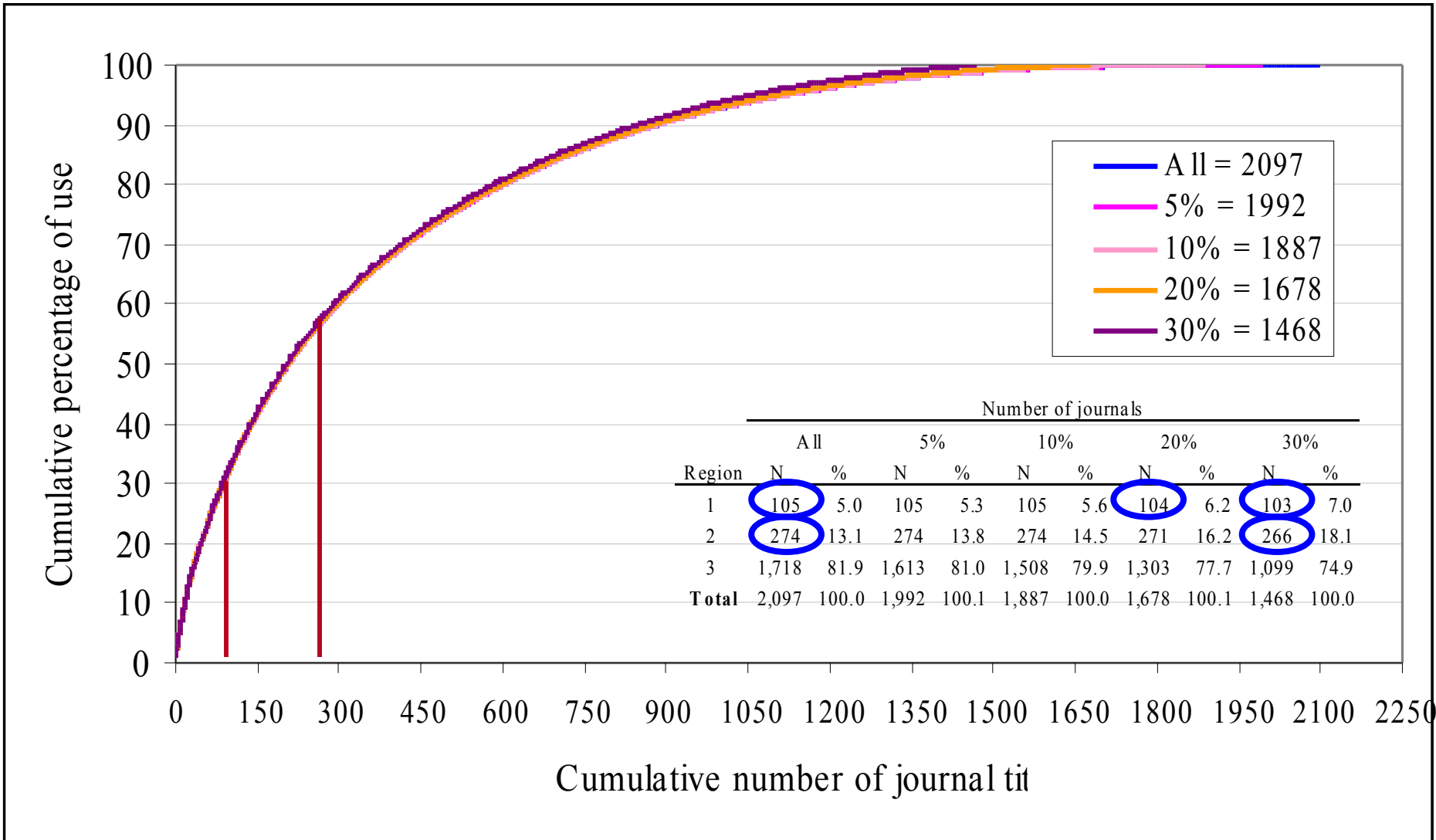
Common core ScienceDirect journals



Journal name	Ranks by years							
	2001/07	2001	2002	2003	2004	2005	2006	2007
Food Chemistry	1	9	9	12	1	1	2	1
European Journal of Operational Research	2	5	5	4	2	2	3	2
Lancet, The	3	29	11	1	3	3	5	6
Journal of Materials Processing Technology	4	6	2	2	4	6	7	3
Journal of Food Engineering	5	26	24	21	6	8	4	5
Tetrahedron Letters	6	19	13	15	12	4	10	15
Journal of Chromatography A	7	13	10	11	10	11	9	14
Analytica Chimica Acta	10	7	12	6	18	17	12	13
Water Research	11	3	4	10	15	16	22	30
Cement and Concrete Research	12	27	6	5	19	5	30	52
Materials Science and Engineering A	13	15	23	19	16	20	17	8
Tetrahedron	15	32	27	23	25	7	14	17
Polymer	16	18	22	16	23	19	15	11
Biomaterials	17	49	19	20	14	15	20	26
Surface and Coatings Technology	18	24	16	36	26	18	18	10
Bioresource Technology	20	36	28	39	28	21	16	7



Removing 30% from the tail of ScienceDirect journal titles makes almost no effect on heavily or intermediately used titles

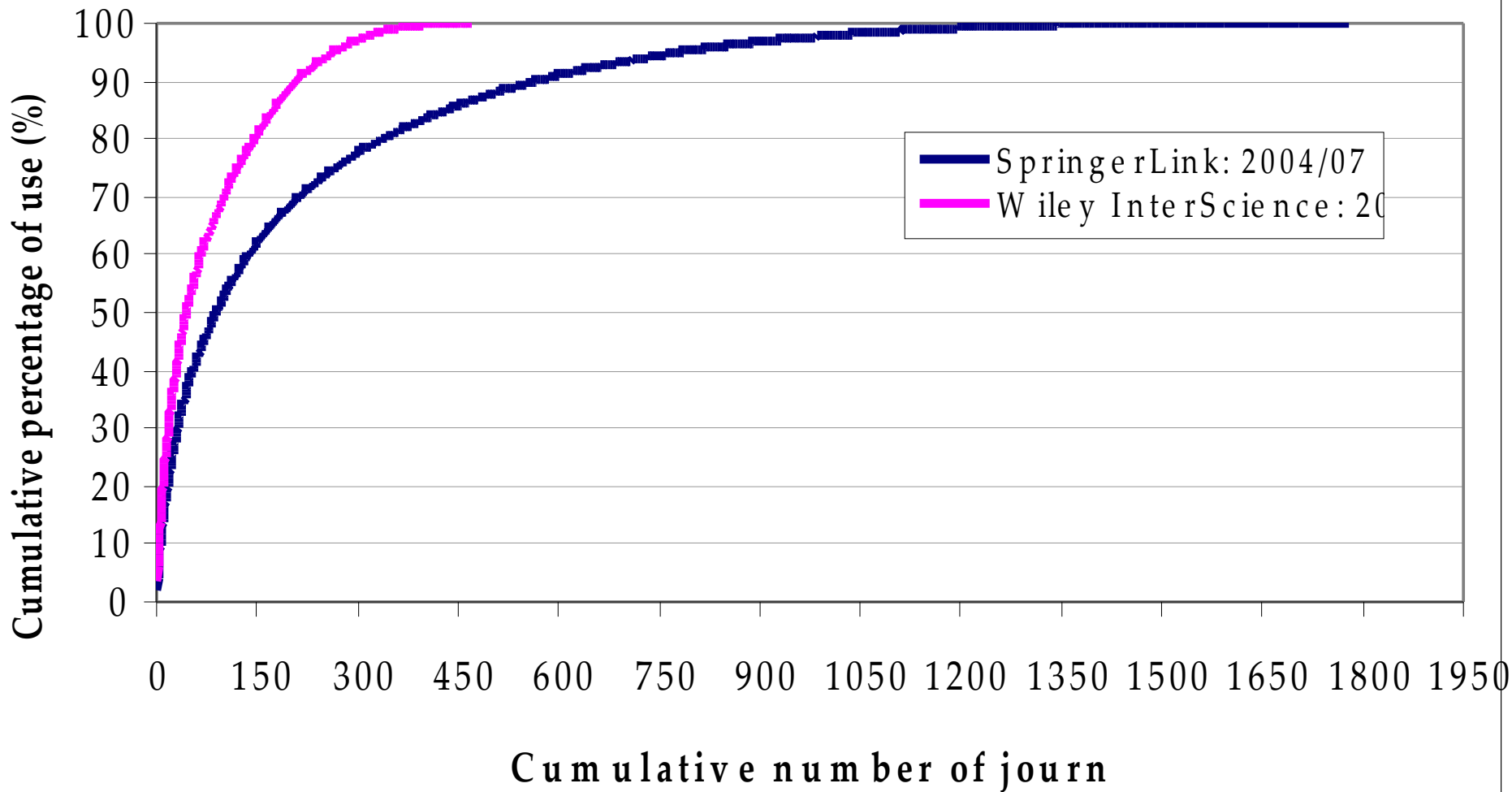


Top 30 ScienceDirect core journals

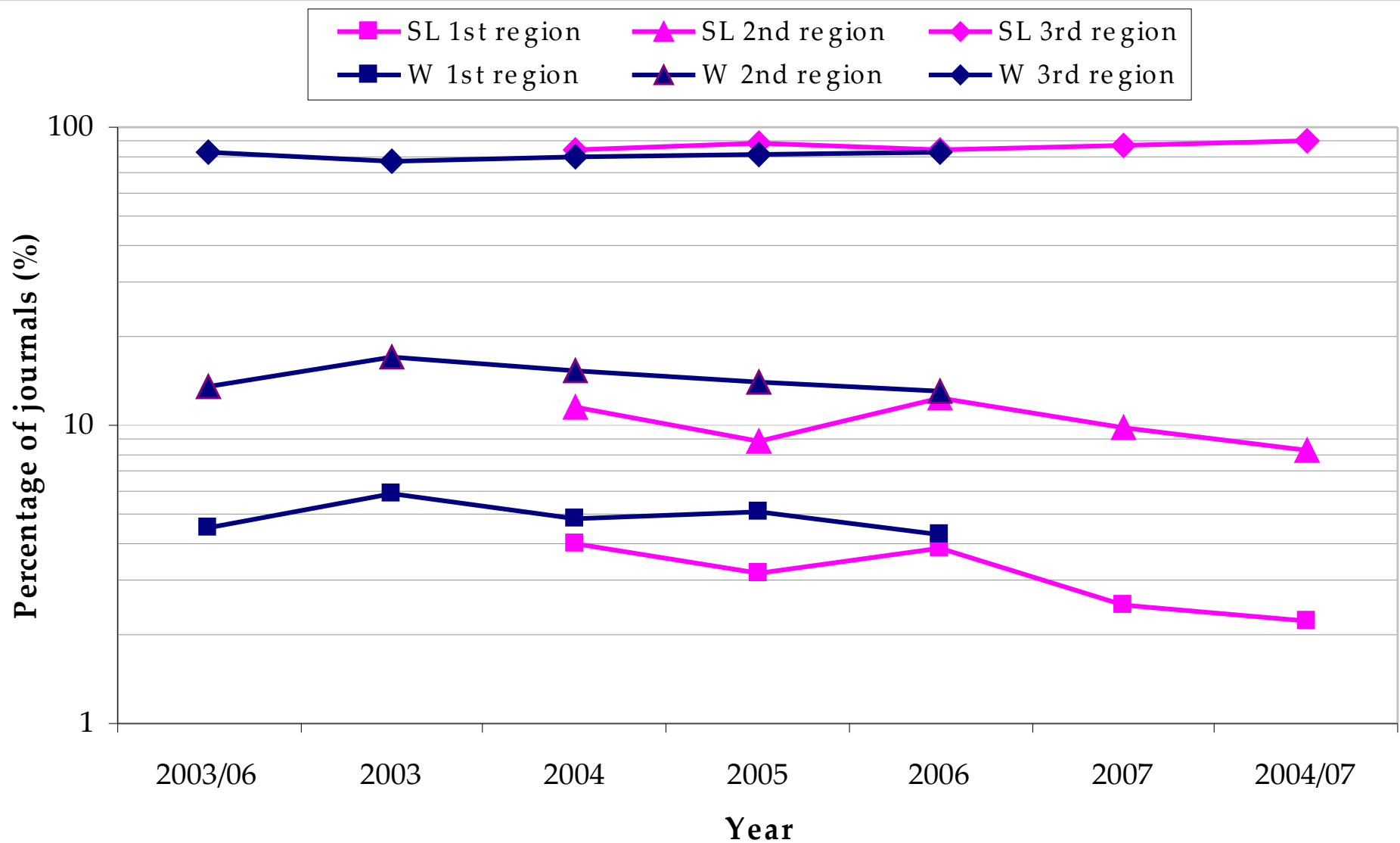


1. Food Chemistry
2. European J. of Operational Research
3. Lancet, The
4. J. of Materials Processing Technology
5. Journal of Food Engineering
6. Tetrahedron Letters
7. Journal of Chromatography A
8. J.of the Americ.Coll. of Cardiology
9. Clinical Biochemistry
10. Analytica Chimica Acta
11. Water Research
12. Cement & Concrete Research
13. Materials Science & Engineering A
14. Applied Math. & Computation
15. Tetrahedron
16. Polymer
17. Biomaterials
18. Surface & Coatings Technology
19. Fertility & Sterility
20. Bioresource Technology
21. Annals of Thoracic Surgery, The
22. American J. of Cardiology, The
23. Journal of Hazardous Materials
24. Chemosphere
25. Energy Conversion & Management
26. Aquaculture
27. Urology
28. International Journal of Production Economics
29. Thin Solid Films
30. Brain Research

Bradford curves for use of Springer Link and Wiley InterScience journals

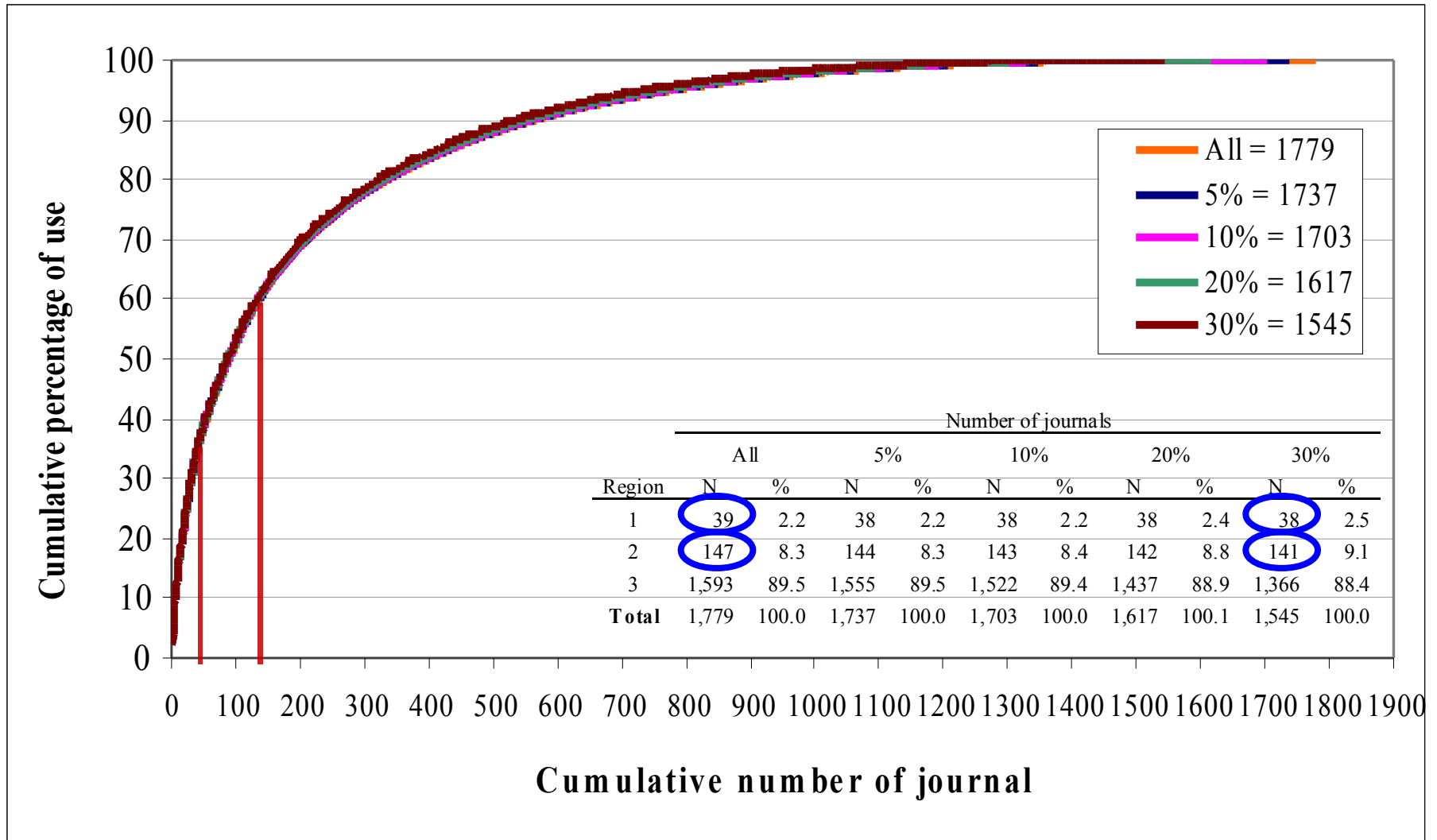


Yearly distributions of SpringerLink and Wiley InterScience journal titles by region





Removing 30% from the tail of Springer Link journal titles makes almost no effect on heavily or intermediately used titles



Top 39 Springer Link core journals



1. Journal of Intelligent Manufacturing
2. European Radiology
3. Pediatric Nephrology
4. World Journal of Surgery
5. Pediatric Surgery International
6. Pediatric Radiology
7. Intensive Care Medicine
8. Environmental Geology
9. Journal of Neurology
10. Aesthetic Plastic Surgery
11. European Food Research & Technology
12. European Journal of Pediatrics
13. Surgical Endoscopy
14. Clinical Rheumatology
15. Rheumatology International
16. The International Journal of Advanced Manufacturing Technology
17. European Journal of Nuclear Medicine & Molecular Imaging
18. Theoretical & Applied Genetics
19. Abdominal Imaging
20. Osteoporosis International
21. Applied Microbiology & Biotechnology
22. Diseases of the Colon & Rectum
23. Acta Neurochirurgica
24. Journal of Materials Science
25. Surgery Today
26. Neuroradiology
27. Journal of Medical Systems
28. Annals of Biomedical Engineering
29. Child's Nervous System
30. European Spine Journal
31. Diabetologia
32. Pediatric Cardiology
33. Analytical & Bioanalytical Chemistry
34. Skeletal Radiology
35. Hydrobiologia
36. Annals of Hematology
37. European Archives of Oto-Rhino-Laryngology
38. Digestive Diseases & Sciences
1. **European Journal of Clinical Microbiology & Infectious Diseases**

Consortial use of Springer Link and Wiley Interscience journal packages



Journal packages	# of journal titles	# of ANI members	<u>% of titles used by a</u>				
			X	SD	Median	Min	Max
SpringerLink	1,779	77	40	23	45	1	79
Wiley Interscience	470	48	74	15	77	15	95



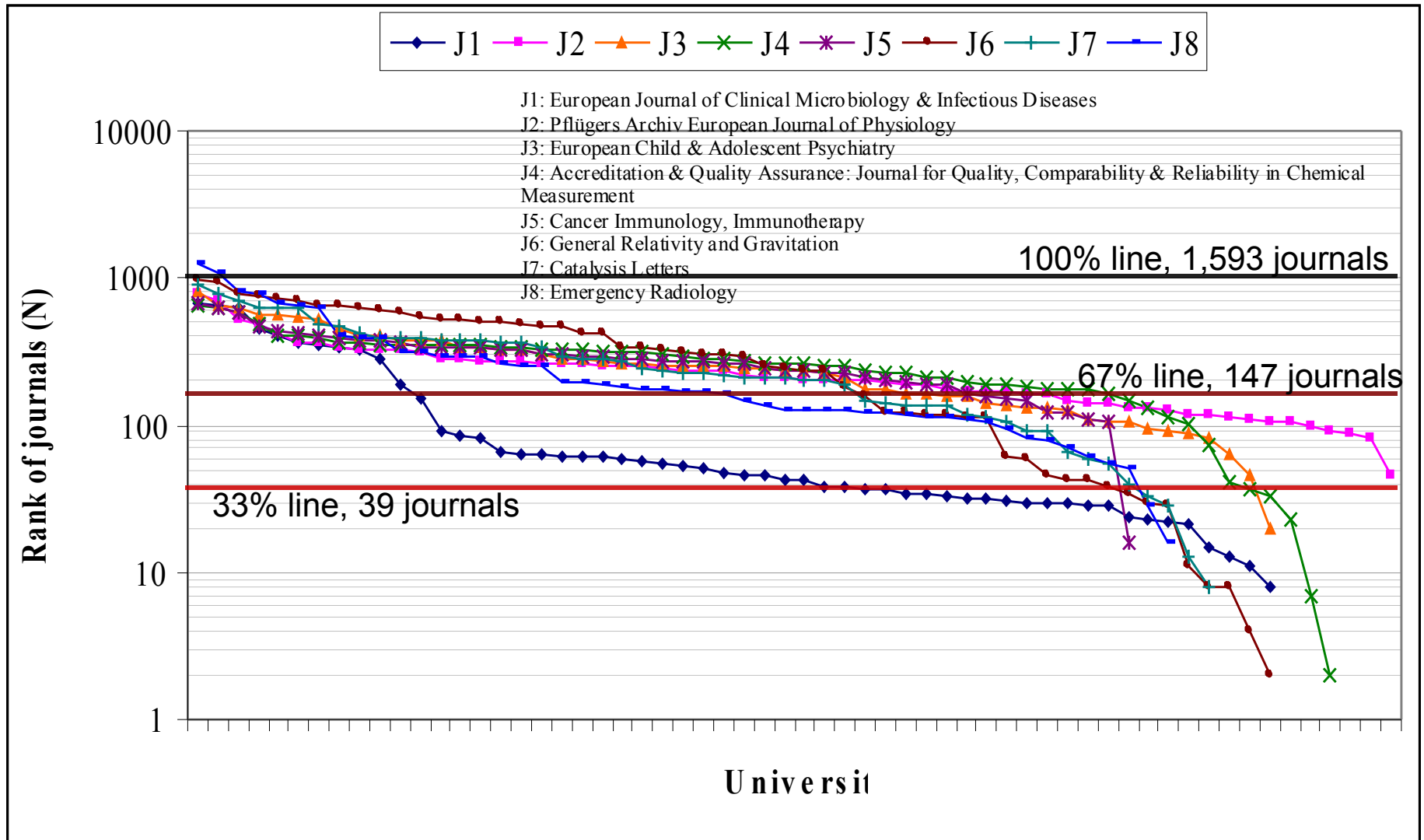
8 SL journals affected by removal of tail

University no.	# of journal titles used	% of total journal titles used (N=1,779)							
		J1*	J2*	J3*	J4*	J5*	J6*	J7*	J8*
1	605	34	251	382	-	-	314	209	187
2	873	49	58	104	260	363	154	-	254
3	822	46	186	236	564	637	-	469	390
4	951	53	32	130	175	228	148	307	292
5	925	52	328	168	157	320	593	65	-
6	1274	72	21	119	127	253	205	182	393
7	1076	60	85	280	255	326	268	588	190
8	160	9	-	-	-	-	-	-	-
9	462	26	-	418	140	174	-	43	-
10	445	25	-	271	327	209	303	237	117
11	829	47	43	175	165	353	107	119	-
12	1027	58	457	194	647	-	165	34	13
13	1261	71	682	119	94	399	373	88	631
14	606	34	15	99	237	325	334	498	383
15	832	47	51	201	270	287	234	-	202
16	701	39	351	249	-	145	-	137	-
17	131	7	-	113	-	-	-	45	-
18	1081	61	81	111	248	176	16	704	377
19	831	47	47	220	551	265	380	62	115
20	680	38	-	361	413	492	-	29	394
21	66	4	-	-	-	-	-	-	-
22	1296	73	30	200	46	73	124	962	707
23	301	17	-	273	-	-	-	43	-
24	1376	77	55	210	249	190	192	121	215
25	1038	58	38	213	228	262	416	765	639
26	906	51	24	83	372	362	367	462	90
27	548	31	406	248	405	346	280	-	-
28	919	52	31	105	374	662	190	247	776
29	286	16	-	259	134	115	-	-	-
30	1347	76	28	172	173	271	245	628	145
31	849	48	62	148	130	342	284	716	-
32	796	45	56	201	246	290	438	-	618
33	826	46	361	779	-	130	324	327	33
34	502	28	34	142	90	311	-	-	-
35	1286	72	32	90	109	165	110	646	228
36	509	29	66	-	249	-	302	-	51
37	133	7	-	-	-	-	-	-	-
38	896	50	1	171	266	239	339	643	240
39	632	36	-	253	161	176	-	501	470
40	179	10	-	-	-	-	-	-	-
41	1204	68	284	327	809	102	622	114	140
42	29	2	-	-	20	-	-	-	-
43	1332	75	45	163	104	286	158	336	287
44	54	3	-	-	-	-	-	-	-
45	773	43	62	325	-	41	404	124	39
46	55	3	-	-	-	-	-	-	-
47	117	7	24	-	-	-	-	-	-
48	95	5	-	-	-	-	-	-	29
49	1039	58	37	262	526	588	120	493	900
50	509	29	63	332	-	347	-	232	224
51	1051	59	30	314	82	210	229	778	55
52	1021	57	-	362	133	23	392	156	270
53	21	1	-	-	-	-	-	-	-
54	342	19	11	88	63	1	232	-	-
55	871	49	30	45	333	260	263	116	282
56	43	2	-	-	-	-	-	11	-
57	531	30	91	492	-	180	-	-	107

- J1 European Journal of Clinical Microbiology & Infectious
- J2 Pflügers Archiv European Journal of Physiology
- J3 European Child & Adolescent Psychiatry
- J4: Accreditation & Assurance for Quality, Comparability & Reliability in Chemical Measurement
- J5 Cancer Immunology, Immunotherapy
- J6 General Relativity and Gravitation
- J7 Catalysis Letters
- J8 Emergency Radiology

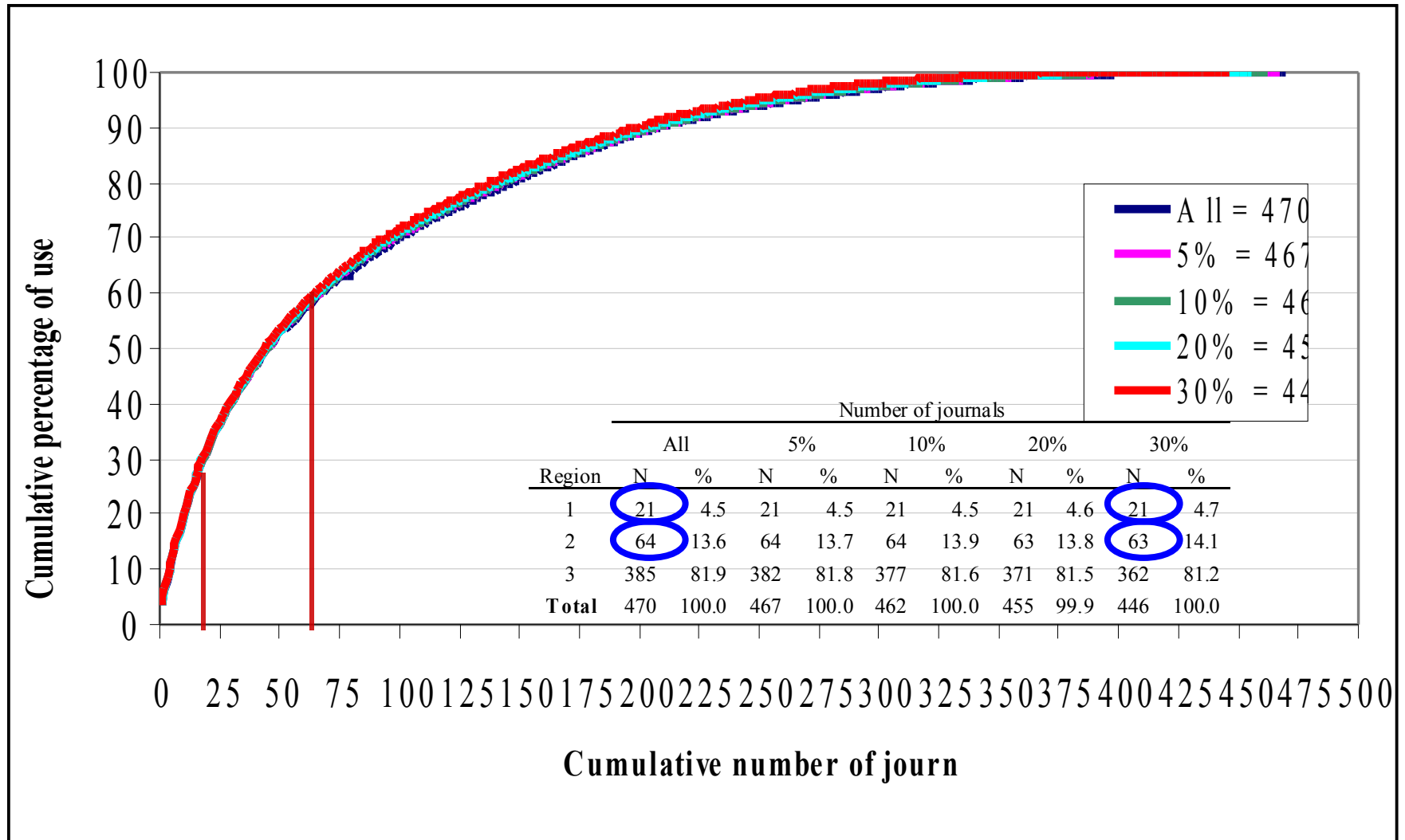
8 Springer Link journals dropped from the list were heavily used (red cells) by only a few libraries (ie, in the first region). They were rarely used by the great majority of libraries (pink cells).

Ranks of 8 SL journals in each university when 30% of journal titles removed from the consortial journal list





Removing 30% from the tail of Wiley InterScience journal titles makes almost no effect on heavily or intermediately used titles



Top 21 Wiley Interscience core journals



1. Journal of Applied Polymer Science
2. Cancer
3. American Journal of Medical Genetics
4. Journal of Polymer Science
5. Hepatology
6. Arthritis & Rheumatism
7. Journal of the Science of Food & Agriculture
8. Journal of Research in Science Teaching
9. Ultrasound in Obstetrics & Gynecology
10. Muscle & Nerve
11. Science Education
12. Journal of Biomedical Materials Research
13. Earthquake Engineering & Structural Dynamics
14. Prenatal Diagnosis
15. Angewandte Chemie - International Edition
16. Biotechnology & Bioengineering
17. Pediatric Blood & Cancer
18. British Journal of Surgery
19. Strategic Management Journal
20. International Journal of Energy Research
21. Microwave & Optical Technology Letters

Macromolecular Symposia



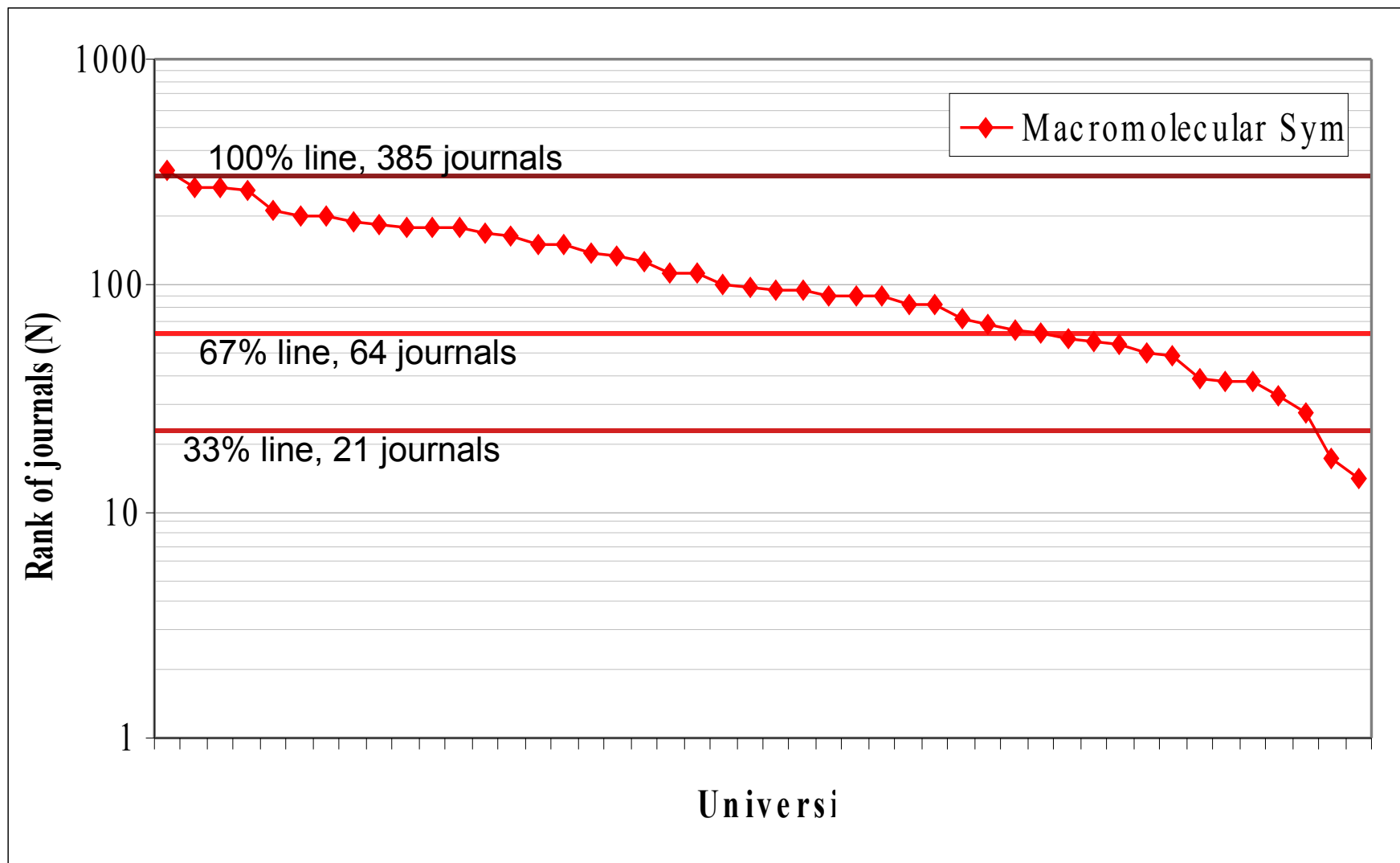
University no.	# of journal titles used	% of total journal titles used (N=470)	Journal Macromolecular Symposia
1	275	59	264
2	385	82	63
3	324	69	114
4	398	85	178
5	346	74	324
6	383	81	274
7	306	65	203
8	374	80	96
9	368	78	61
10	324	69	90
11	346	74	83
12	221	47	95
13	337	72	55
14	412	88	153
15	433	92	115
16	406	86	185
17	308	66	191
18	374	80	99
19	69	15	-
20	438	93	134
21	332	71	129
22	390	83	181
23	397	84	38
24	277	59	-
25	384	82	89
26	373	79	169
27	429	91	17
28	345	73	68
29	349	74	33
30	387	82	215
31	380	81	49
32	376	80	38
33	377	80	269
34	243	52	150
35	138	29	58
36	432	92	51
37	292	62	166
38	359	76	179
39	446	95	14
40	330	70	90
41	341	73	82
42	390	83	202
43	359	76	102
44	442	94	39
45	341	73	137
46	337	72	27
47	378	80	71
48	244	52	57

Macromolecular Symposia was heavily used (red cells) by only two libraries (ie, in the first region). It was rarely used by the great majority of libraries (pink cells).





Ranks of *Macromolecular Symposia* in each university when 30% of journal titles removed from the consortial journal list





- Removing 30% of journal titles from the tail makes almost no effect on consortial core journal list of ANKOS
- Individual ANKOS members can function perfectly well without those titles
- Download requests to a small number of disenfranchised journal titles can be satisfied by other means (i.e., pay-per-view)
- Consortial licensing models should take this into account



The Tail Wagging the Dog? The Impact of Removing Infrequently Used Journal Titles on the Stability of the Consortial Core Journals List

Yaşar Tonta & Yurdagül Ünal

Department of Information Management

Hacettepe University

Ankara, Turkey

{tonta, yurdagul}@hacettepe.edu.tr